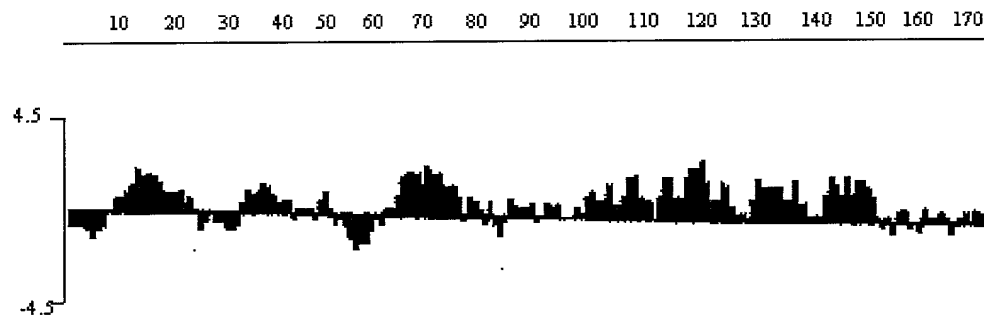


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 61 CCGGGCCTTCCGGGCCAAGCTTCGCTTCTTCAGGCAGCTCCAGGCGCTCCTAGACCTTCC  
 21 P G L P G Q A S L L Q A A P G A P R P S  
 121 AGCAGTACTTTGGTGGACGAGTTGGAGTCATCTTTCGAGGCTTGCTTTGCATCTCTGGTG  
 41 S S T L V D E L E S S F E A C F A S L V  
 181 AGTCAGGACTATGTCAATGGCACCGATCAGGAAGAAATTCGAACCGGTGTTGATCAGTGT  
 61 S Q D V V N G T D Q E E I R T G V D Q C  
 241 ATCCAGAAGTTTCTGGATATTGCAAGACAGACAGAATGTTTTTCTTACAAAAAGATTG  
 81 I Q K F L D I A R Q T E C F F L Q K R L  
 301 CAGTTATCTGTCAGAAAACCAGAGCAAGTTATCAAAGAGGATGTGTCAGAACTAAGGAAT  
 101 Q L S V Q K P E Q V I K E D V S E L R N  
 361 GAATTACAGCGGAAAAGATGCACTAGTCCAGAAGCACTTGACAAAAGCTGAGGCATTGGCAG  
 121 E L Q R K D A L V Q K H L T K L R H W Q  
 421 CAGGTGCTGGAGGACATCAACGTGCAGCACAAAAAGCCCGCCGACATCCCTCAGGGCTCC  
 141 Q V L E D I N V Q H K K P A D I P Q G S  
 481 TTGGCCTACCTGGAGCAGGCATCTGCCAACATCCCTGCACCTCTGAAGCCAACGTGAGCA  
 161 L A Y L E Q A S A N I P A P L K P T \*  
 541 aagggcagag gcagttggcc tatgagtggg ctgatgcgtg aggttggcca cacattcctt  
 601 cctgtggact tga cattttg gaagaa cctt ttgccagata atgagttcat tttagtttta  
 661 tgctccatt gaaaaatttt ccactatttt tataagctgt taatttcttg agtactttat  
 721 aacatgtctg tagcttggat aaaccaagta agtatttttt ttgtcttt agcaaagttt  
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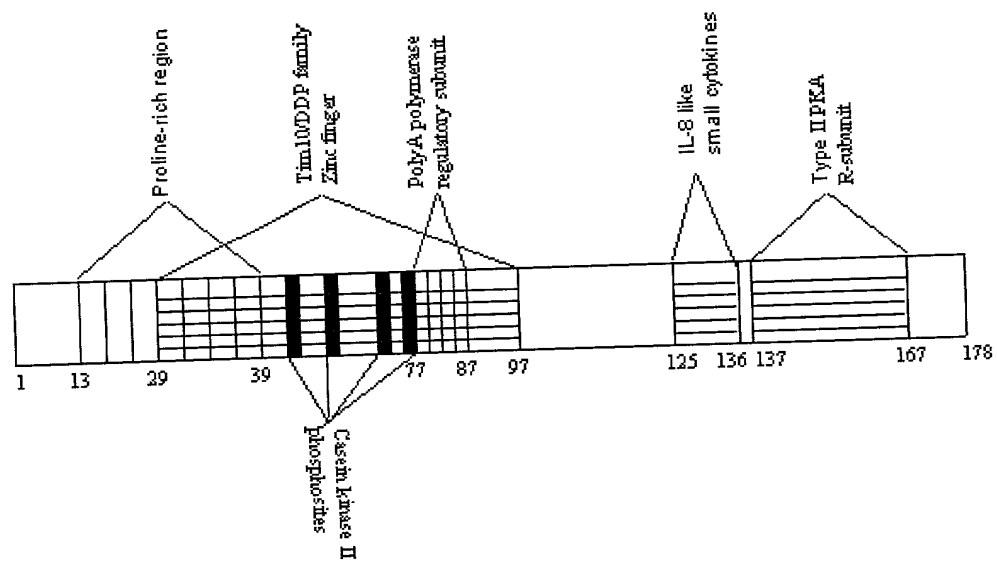
Fig 1A

	MAAXLGGMFXXGQPPGPPXXKPPGLPGQASLLQAAPGAPRPS	Majority
	20 20 30 40	
1	MAAPLGGMHFSQPPGPPQAPPGGLPGQASLLQAAPGAPRPS	Human
1	MAASLGGMETGQPPGPPPPPPGLPGQASLLQAAPGAPRPS	Mouse
1	MAASNESG-----	Drosophila
	XSTLVDELESSFEACFASLVSQDYVNGTDQEEIIRTGVDDC	Majority
	50 60 70 80	
41	SSTLVDELESSFEACFASLVSQDYVNGTDQEEIIRTGVDDC	Human
41	NSTLVDELESSFEACFASLVSQDYVNGTDQEEIIRTGVDDC	Mouse
8	GGMLVDEFEEAEQSCLLTETKQEPNSGTNKEEIDLELVQKT	Drosophila
	IQKFLDIARQTECFFLQKRLQLSVQKPEQVIKEDVSELRX	Majority
	90 100 110 120	
81	IQKFLDIARQTECFFLQKRLQLSVQKPEQVIKEDVSELRN	Human
81	IQKFLDIARQTECFFLQKRLQLSVQKPEQVIKEDVSELRS	Mouse
48	TNRFTIDVFAEQMEAFFLQKRFLLVSTLKEPYMLIEDENQDLST	Drosophila
	ELQKDALVQKHLLTKLRHWQQVLEDIN--VQHK-----	Majority
	130 140 150 160	
121	ELQKDALVQKHLLTKLRHWQQVLEDIN--VQHK-----	Human
121	ELQKDALVQKHLLTKLRHWQQVLEDIN--VQHK-----	Mouse
88	ETQREAEALQKHYNELKEWKACLSDLIQQGVHSRPTPPFGS	Drosophila
	-----KPADMPQGSLLXLEQASANIPA	Majority
	170 180 190 200	
152	-----KPADIPOGSLAYLEQASANIPA	Human
152	-----KPADMPQGSLLAFLEQASANIPA	Mouse
128	GMLOGPGGGMPPMGGTFFRPGMMFGMPFGAMQPGGPNQES	Drosophila
	P-----LKPT	Majority
	210 220	
174	F-----LKPT	Human
174	F-----LEQT	Mouse
168	PHMLQAQQMQQLRMISRQNPKEK	Drosophila

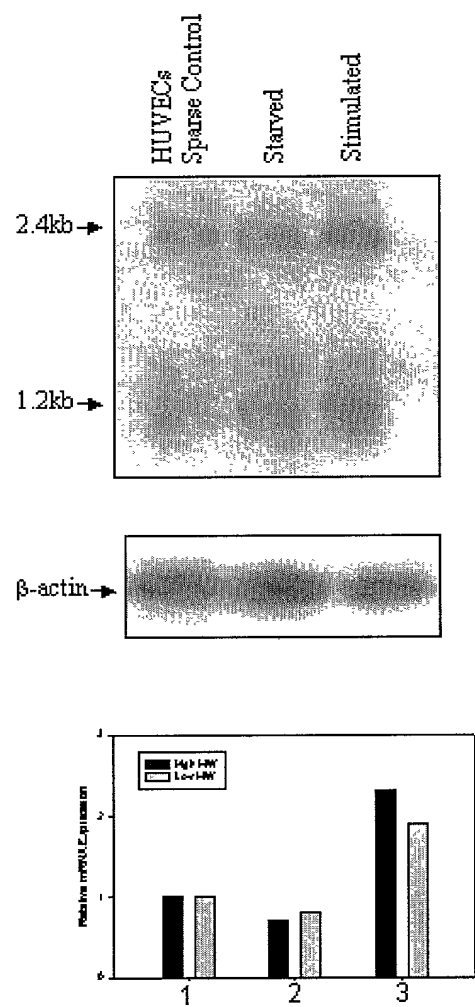
Fig. 1B



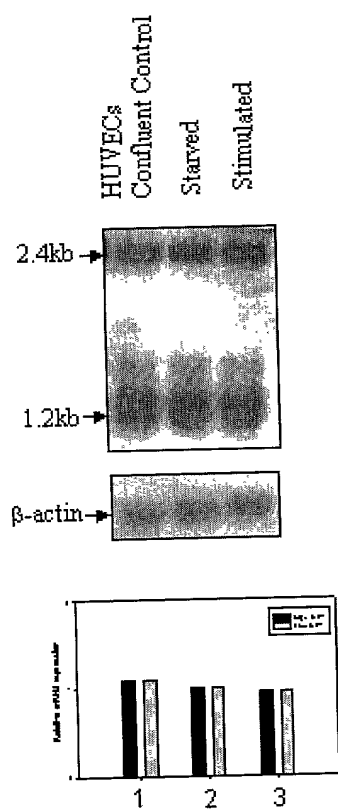
**Fig. 2A**



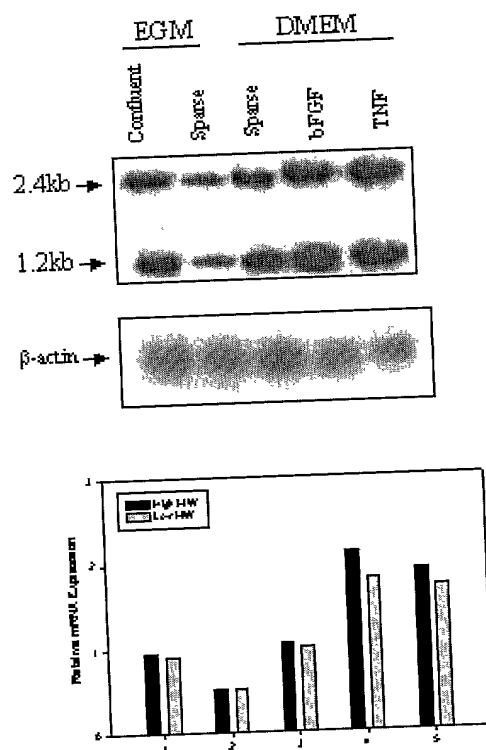
**Fig. 2B**



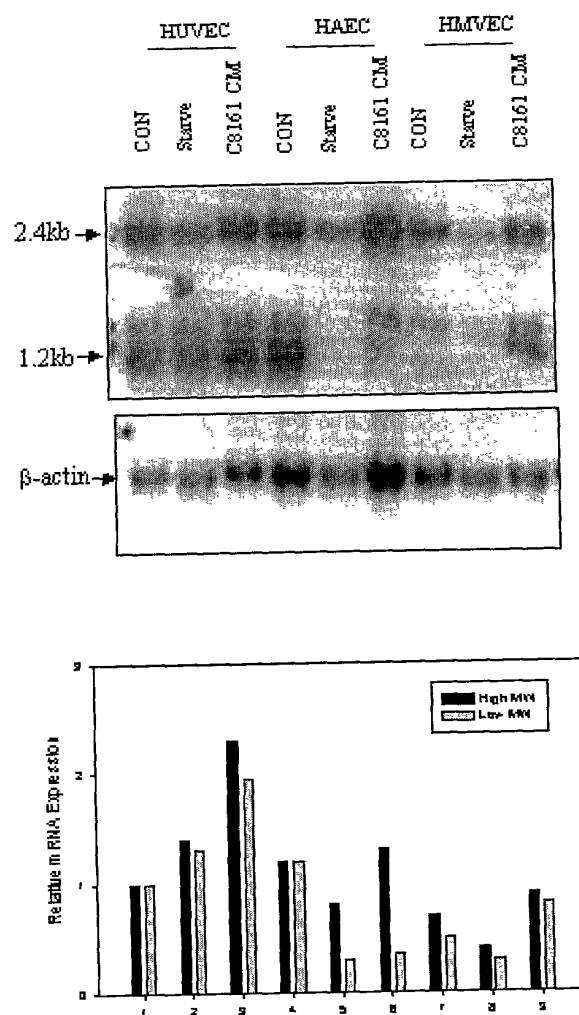
**Fig. 3A**



**Fig. 3B**

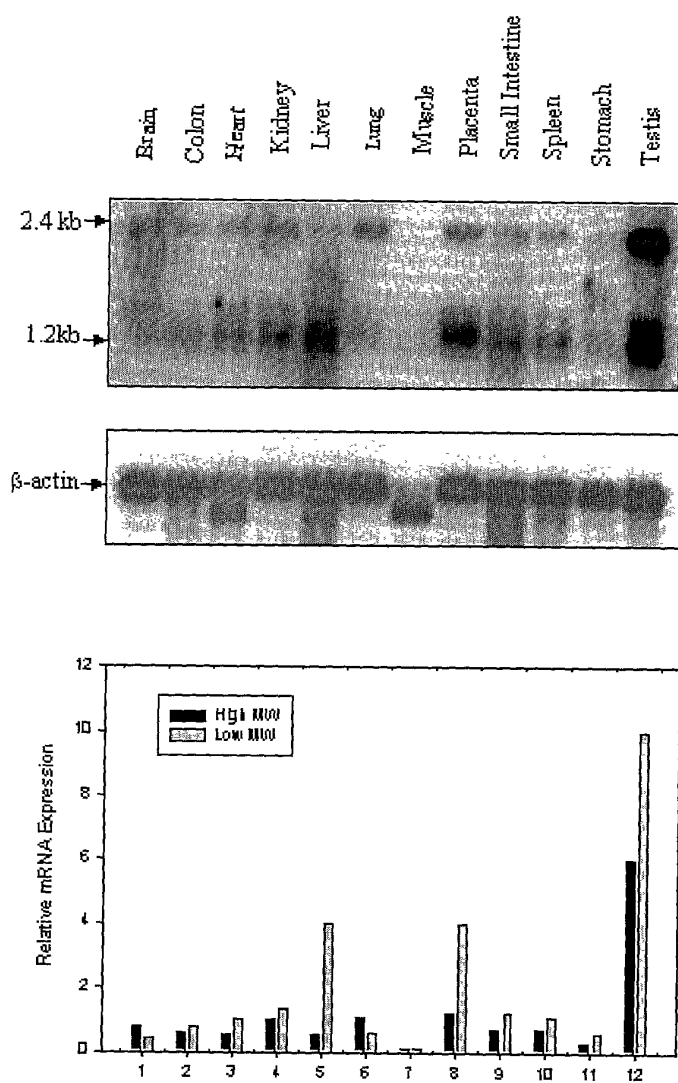


**Fig. 4**

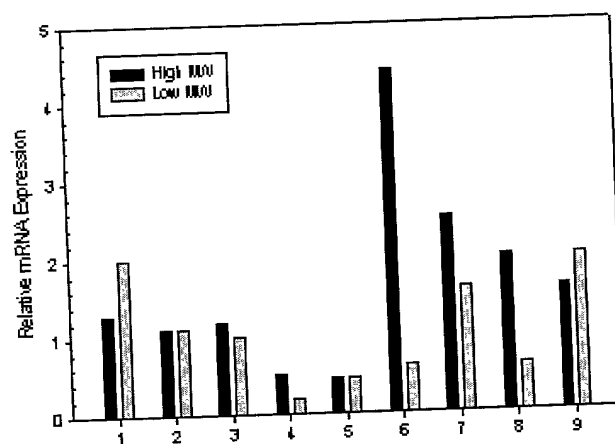
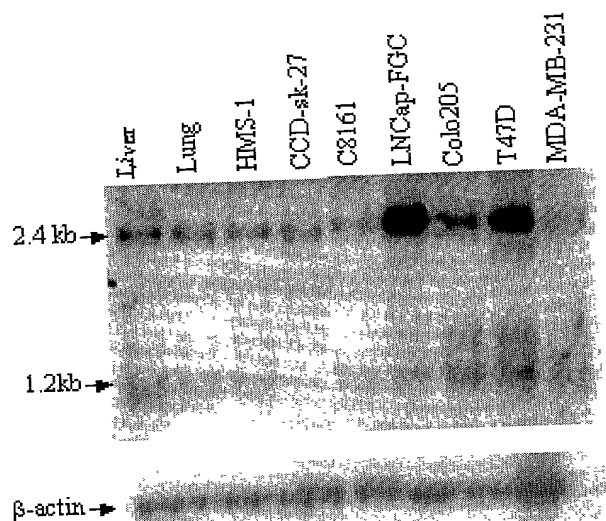


**Fig. 5**

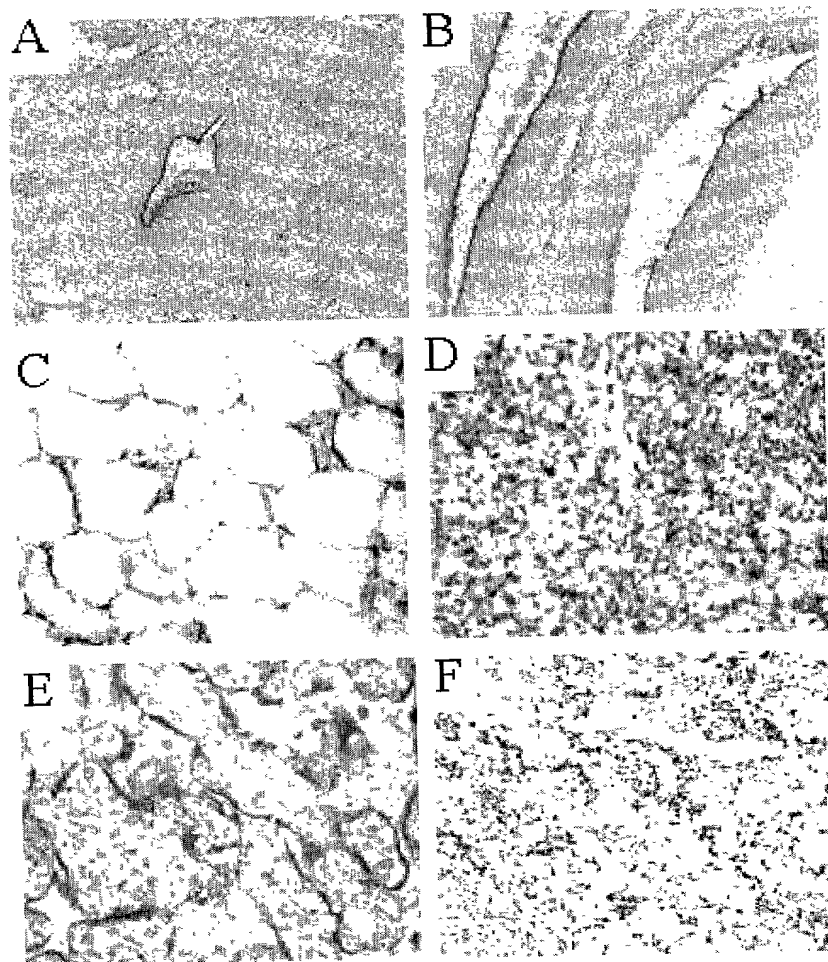




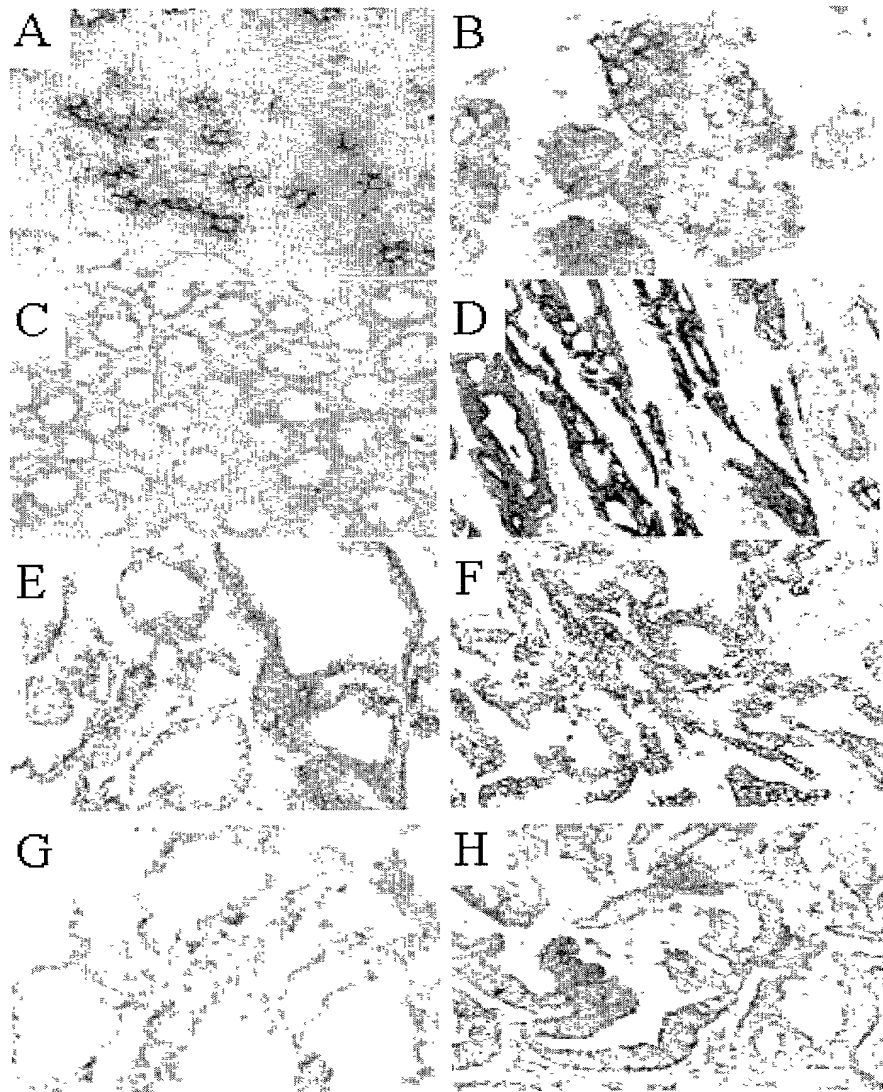
**Fig. 6**



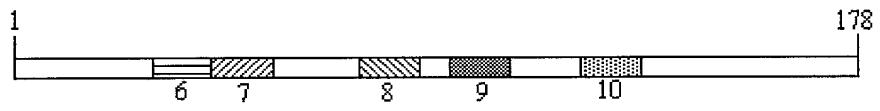
**Fig. 7**



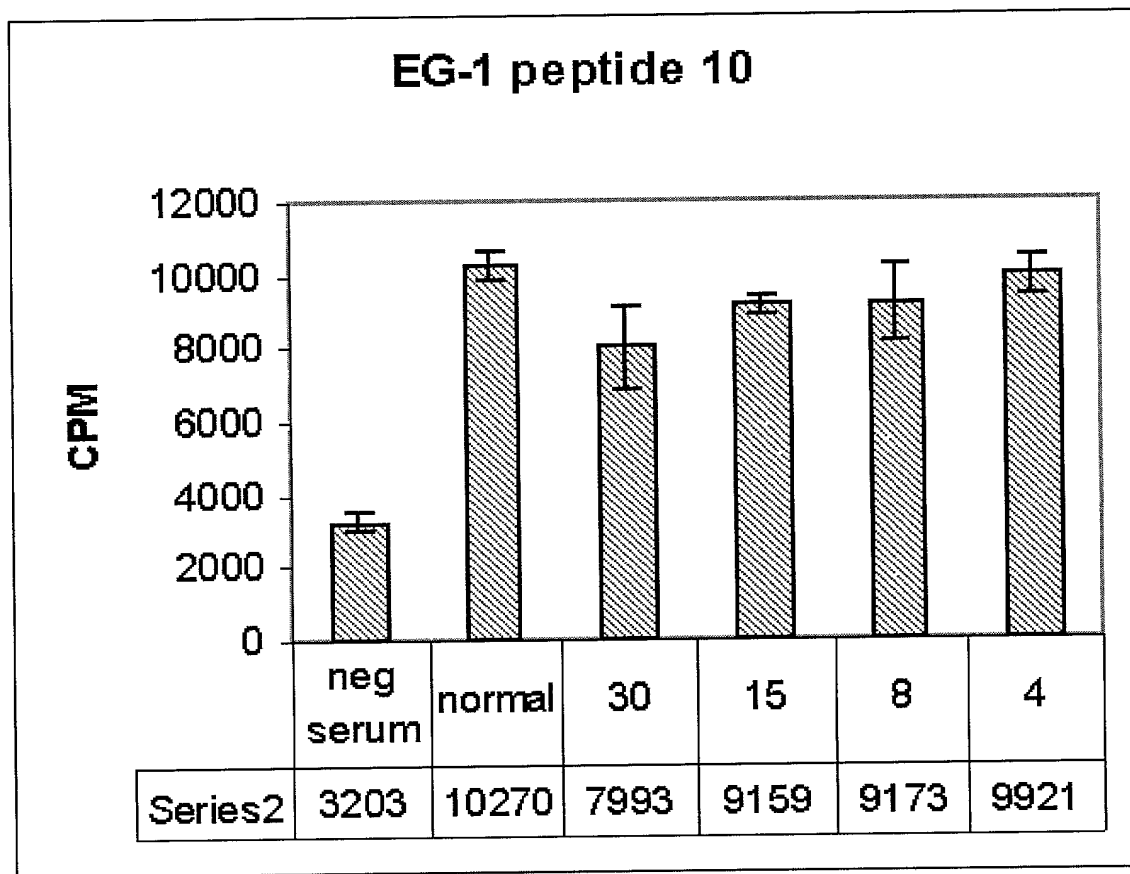
**Fig. 8**



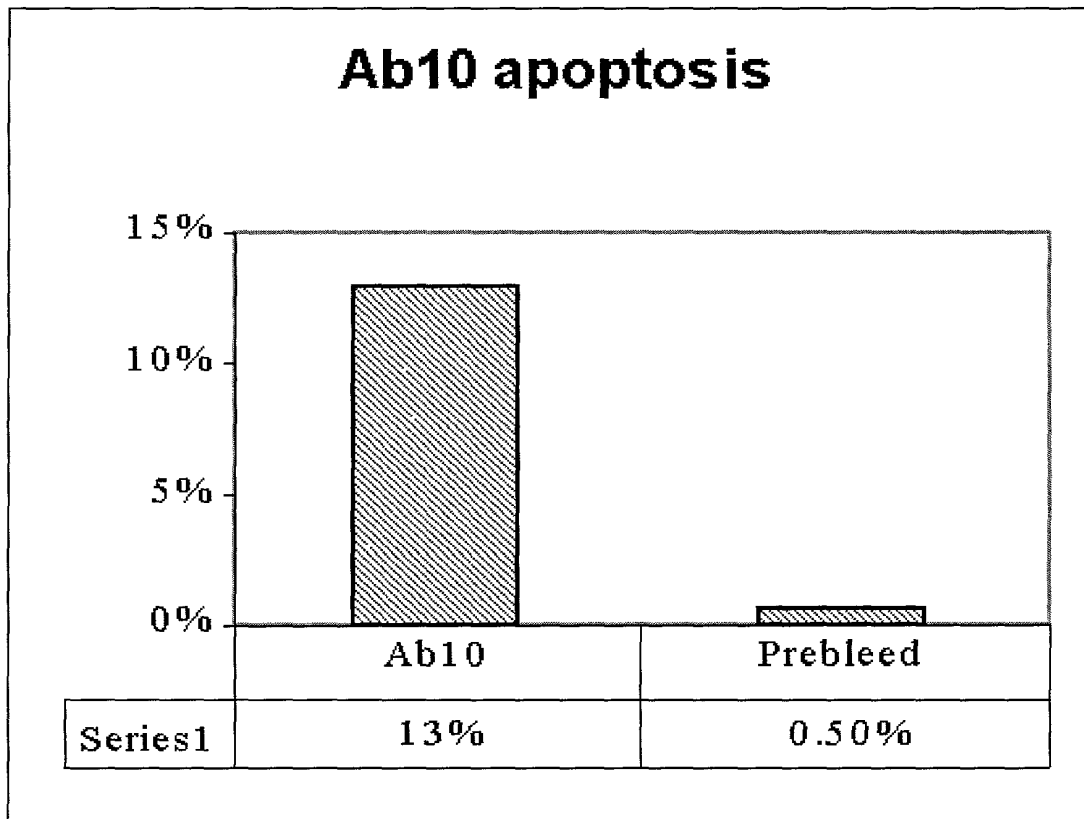
**Fig. 9**



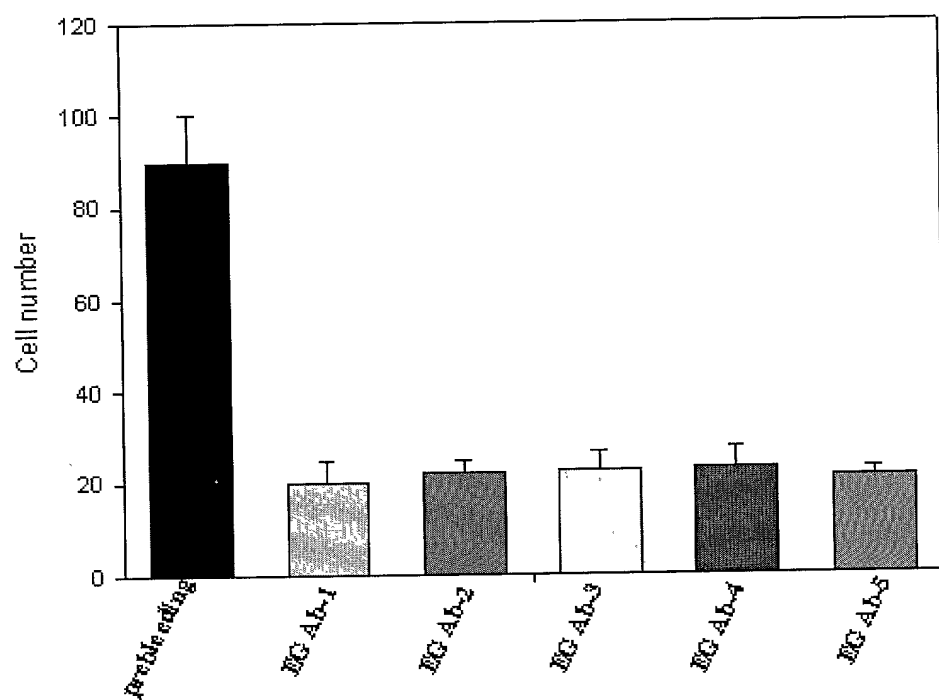
**Fig. 10**



**Fig. 11**

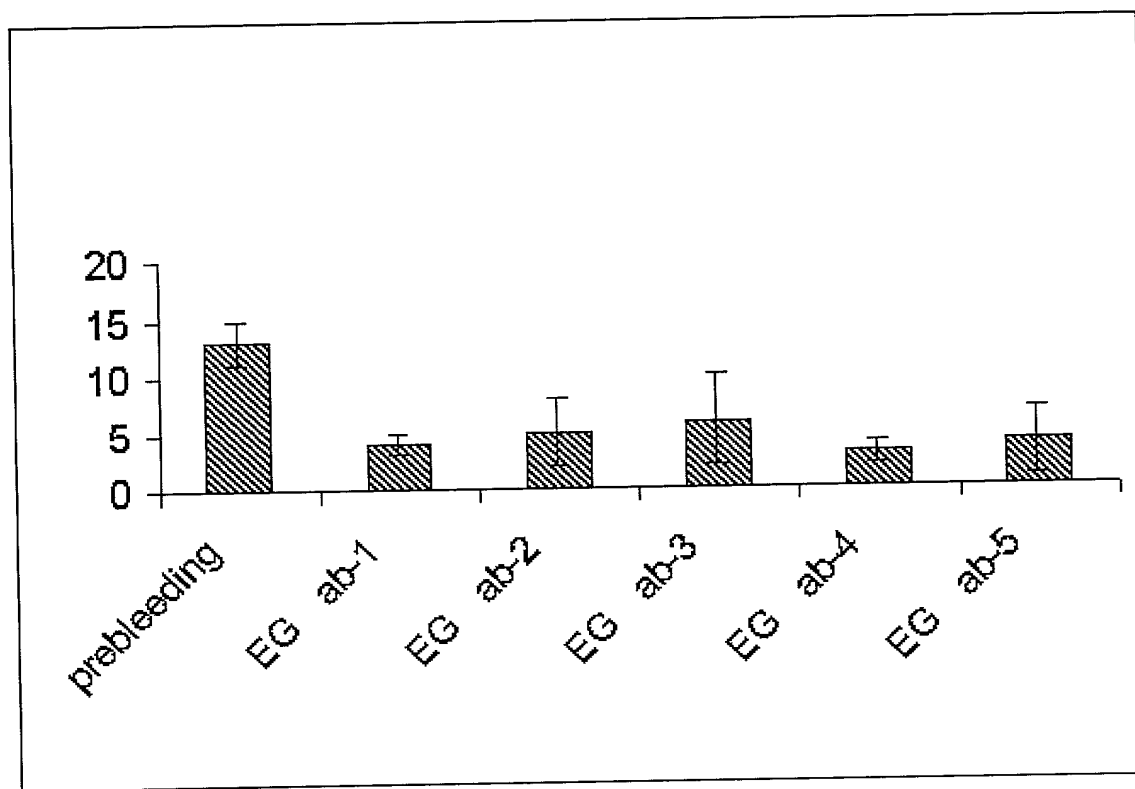


**Fig. 12**



**Fig. 13**





**Fig. 14**

Fig. 15A

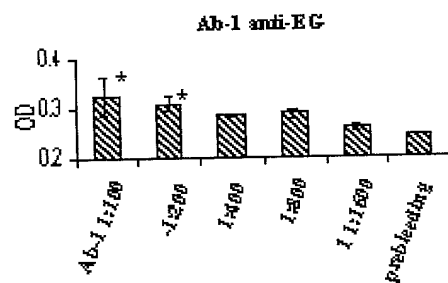


Fig. 15B

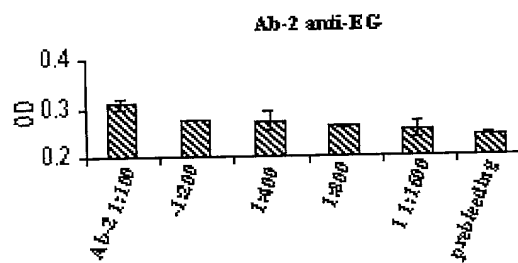


Fig. 15C

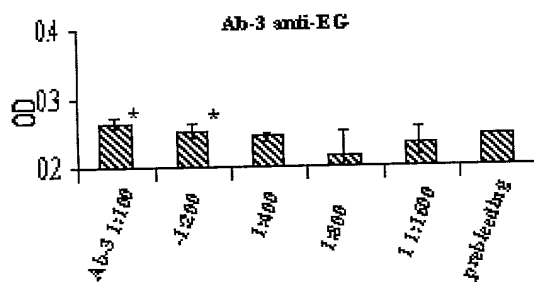


Fig. 15D

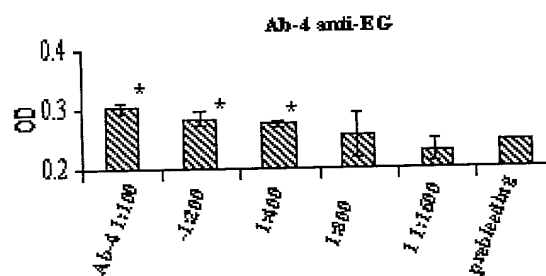
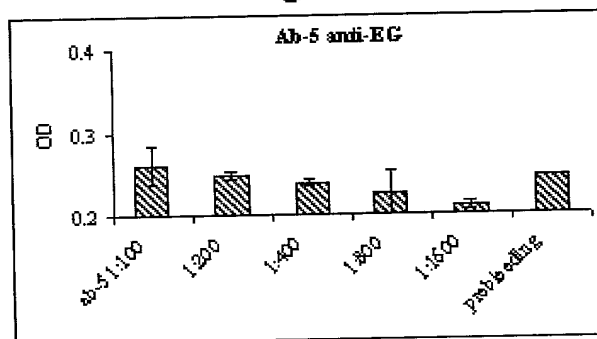
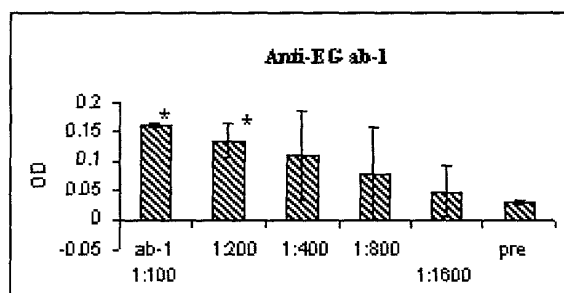
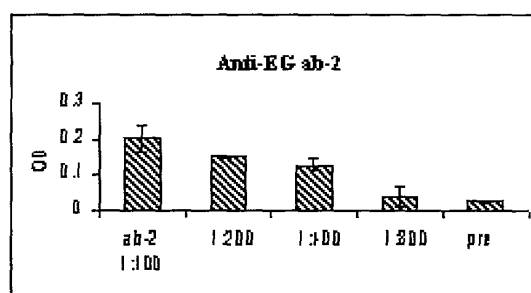
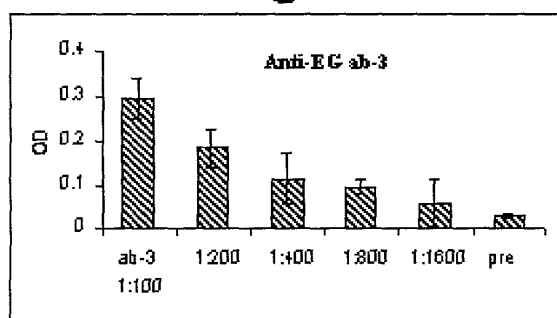


Fig. 15E



**Fig. 16A****Fig. 16B****Fig. 16C****Fig. 16D**